

## **CLAIMS**

### **What is claimed is:**

1. A hollow connector for removably mounting an electrical device having at least a first electrode, the connector comprising:  
an outer elastic casing comprised of a resilient flexible material;  
said connector having a first end and a second end;  
a first electrical conductor extending through said first end; and  
the casing defining an opening, giving access to the interior of the connector, such that when the electrical device is inserted through the opening to the interior of the connector, the casing is stretched and the first electrical conductor is thereby urged against said first electrode, providing electrical communication therebetween.

2. The hollow connector according to claim 1, wherein  
said electrical device has a second electrode;  
a second electrical conductor extends through the second end of said connector; and  
said second conductor being urged against said second electrode by said stretched casing, thereby providing electrical communication therebetween.

3. The hollow connector according to claim 2, wherein said second conductor is integrally bonded to said second end.

4. The hollow connector according to claim 1, wherein said casing defines an aperture in said second end, the casing configured to prevent said electrical device from passing through the aperture, retaining said electrical device inside said connector, said electrical device having a second electrode, thereby exposing at least a portion of said second electrode to the environment outside said connector.

5. The hollow connector according to claim 1, wherein said resilient flexible material is biocompatible.

6. The hollow connector according to claim 1, wherein said resilient flexible material is comprised of silicone.

7. The hollow connector according to claim 1, wherein said first electrical conductor extending through said first end is integrally bonded thereto.

8. The hollow connector according to claim 1, wherein said connector is suitable for implantation in living tissue.

9. The hollow connector according to claim 1, wherein said connector is suitable for use in saltwater.

10. The hollow connector according to claim 1, wherein said connector is configured to retain an electrical sensor.

11. The hollow connector according to claim 1, wherein said connector is configured to retain an electrical stimulator.

12. The hollow connector according to claim 1, wherein said casing contains at least one seal lip that mates with said electrical device to electrically isolate said first electrode.

13. The hollow connector according to claim 1, wherein said electrical device is configured to mate with said sealing ridge.

14. The hollow connector according to claim 1, wherein said casing has a wall thickness that is thickened proximate the opening defined by said casing.

15. The hollow connector according to claim 14, wherein the casing has at least one shoulder; and the casing wall thickness is thickened at the shoulder.

16. A method of removably anchoring an electrical conductor to an electrical device to establish electrical communication therebetween, comprising the steps of:

providing a hollow connector having at least one electrical conductor positioned interior of the connector;

providing said hollow connector that is at least partially comprised of an elastic casing;

providing an electrical device having at least one electrode;

providing an opening in said hollow connector for receiving said electrical device into said hollow connector, whereby the elastic casing is stretched to accommodate said device; and

inserting said implantable electrical device through said opening such that said at least one electrical conductor is urged against said at least one electrode by said stretched elastic casing.

17. The method of claim 14, wherein said step of providing the hollow connector having at least one electrical conductor positioned interior of the connector is further comprised of an electrical contact attached to said electrical conductor for contacting said at least one electrode.

18. The method of claim 14, wherein said step of providing said hollow connector is further comprised of selecting biocompatible materials for said connector.

19. The method of claim 14, wherein said step of providing said hollow connector that is at least partially comprised of an elastic casing is further comprised of providing at least one sealing ridge inside said hollow connector to seal against said electrical device.